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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,420	12/11/2003	Donald E. Gordon	03343-PA	1829

EXAMINER	
SAYALA, CHHAYA D	

ART UNIT	PAPER NUMBER
1761	

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ARMSTRONG, KRATZ, QUINTOS,
HANSON & BROOKS, LLP
Intellectual Property Law Offices
502 Washington Avenue, Suite 220
Towson, MD 21204

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/733,420

Applicant(s)

GORDON, DONALD E.

Examiner

C. SAYALA

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 16-18 and 20-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-14, 16-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 20-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 20 recites compacting the mixture with 100 tons pressure. Pressure is defined as force exerted on a surface per unit area. The units of pressure should generally be defined as Force/unit area (such as pounds per square inch or tons per square inch or cm or square foot, etc.). Without the correct units, a proper comparison with prior art is impossible.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCoy (US Patents 3567460 or 5487772) or Nau (US Patent 3353949) in view of

JP 52117776 and JP 52050878 and further in view of Kust (US Patent 5917110) and Woerther (US Patent 3096171).

As stated in the specification at page 1, the primary patents all teach sugar, micronutrients that are in their oxide form, that are ground and screened to the required size. McCoy in particular, teaches all the elements: micronutrient oxide, sugar and lime (see col. 6, line 65) except clay. The patents do not teach the clay or the lime (Nau). They teach that the product is granular, but not that the product is pelleted/compacted or that it is covered with wax. The JP '776 patent teaches that when a saccharidic material such as fermentation waste is combined with lime, it provides anti-dust properties, does not show hygroscopic properties and is a better fertilizer. Furthermore, JP '878 teaches that when beet sugar waste liquor is combined with bentonite or lime, it facilitates granulation as these substances act as dehydration aids. Also, it is well known that clay improves dispersibility of fertilizers and is a common additive in the art.

Kust teaches a calcium-containing core particle such as calcium saccharide, that is coated with a paraffin wax (claims 1 and 5) to make it hydrophobic and thus free-flowing. Woerther teaches granular water-soluble fertilizers that can be coated with waxes for the added benefit of slow-release characteristics. See claim 1.

Therefore, it would have been obvious to combine lime and clay for the express benefits stated above and to wax the pellet or granule so that benefits such as those described above can be realized. The amount of sugar claimed would have been obvious to one of ordinary skill in the art because, trace minerals, which is the subject matter of the invention, in the form of metal oxide, are generally used in small amounts

and the sugar required to form the carboxylate shown at page 3 of the specification and at col 4 in McCoy ('772), would therefore be commensurate with the metal oxide amount. Also, the amount of sugar claimed at claim 24 does not pertain to the final product and since these are composition claims and the claim is to the milled, compressed product, the sugar solution is beyond the scope of examination of these composition claims. In any event, the sugar concentration would depend on the sugar source and to determine the sugar content of the solution would have been within the ambit of ordinary skill. Note that although claim 20 recites product-by-process steps, these have been given little weight since it is well established that "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Therefore, when applicant's claim is written in product-by-process format, it is the novelty of the instantly claimed product that needs to be established and not that of the recited process steps. In re Brown, 173 USPQ 685 (CCPA 1972); In re Wertheim, 191 USPQ (CCPA 1976). In addition, since applicant's claim recites a process step with "approximately 100 tons pressure" and pressure is defined as force exerted on a surface per unit area, a proper comparison with prior art was impossible given such units. The units of pressure should generally be defined as

Force/unit area (such as pounds per square inch or tons per square inch or cm or square foot, etc.).

Response to Arguments

Applicant's arguments filed 4/17/2007 have been fully considered but they are not persuasive.

Applicant has urged patentability be based on the newly added limitation. As explained above, since it is well established that "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. " In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Therefore, when applicant's claim is written in product-by-process format, it is the novelty of the instantly claimed product that needs to be established and not that of the recited process steps. In re Brown, 173 USPQ 685 (CCPA 1972); In re Wertheim, 191 USPQ (CCPA 1976). In addition, since applicant's claim recites a process step with "approximately 100 tons pressure" and pressure is defined as force exerted on a surface per unit area, a proper comparison with prior art was impossible given such units. The units of pressure should generally be defined as Force/unit area (such as pounds per square inch or tons per square inch or cm or square foot, etc.).

See US Patent 4203962, which uses a pressure of 5-100 tons/sq in (col. 2, line 54) to compress alumina oxide in order to granulate it. Note too, that the instant specification states that the temperature of 170⁰F is obtained by the frictional forces that occur during compacting, which therefore, occurs concomitantly with simply compressing the composition using the pressure of 100 tons/square ??.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Sayala whose telephone number is (571) 272-1405. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



C. SAYALA
Primary Examiner
Group 1700.